

North Lake Dam and North Lake

OWNER

Dallas Power and Light Company.

ENGINEER (Design)

Ebasco Services Incorporated.

LOCATION

On South Fork Grapevine Creek in Dallas County, 2 miles southeast of Coppell.

DRAINAGE AREA

3 square miles. Runoff is supplemented by pumping from Elm Fork Trinity River.

DAM

Type	Earthfill
Length of dam and dike	7,146 ft
Maximum height	65 ft
Top width	12 ft
Length of the saddle dam	1,500± ft

SPILLWAY

Type	Concrete (uncontrolled)
Control	None
Elevation	510.0 ft above msl
Crest length	200 ft

OUTLET WORKS

Water is circulated from the lake to the generating station and returned to the lake.

POWER GENERATION FEATURES

Number of units	3
Capacity (total)	700,000 kw

STATE AUTHORIZATION

Permit No. 1864 (Application No. 1993) April 23, 1957, authorizes storage of 16,000 acre-feet of water and annual use of 1,000 acre-feet. In addition, a purchase contract with the city of Dallas allows pumping of 9,550 acre-feet of water annually to the reservoir from Elm Fork Trinity River. The water is released from reservoirs owned by the city of Dallas.

RESERVOIR DATA (Based on revised curves dated June 6, 1958)

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of dam	515.0	—	—
Spillway crest	510.0	17,000	800
Invert of low flow outlet	494.25	7,600	454

GENERAL

Construction started	1956
Dam completed	1957
Impoundment of water began	March 1957
Power generation began	1959
General contractor for dam	Vilbig Construction Company
Estimated cost of dam	\$550,000

